REMARKS

Claims 1-17 and 19-25, as amended, remain herein. Claims 1, 3-5, 19 and 20 are amended and claim 18 is canceled. New claims 21-25 are added.

1. Claims 1-7, 10, 12, and 16-18 were rejected under 35 U.S.C. § 102(b) over the Przybilla <u>Proceedings of SPIE</u> article ("Przybilla"). Claim 18 is canceled, mooting rejection of this claim.

Claim 1 claims a photoresist base material consisting essentially of an extreme ultraviolet reactive organic compound represented by the following general formula (1)

having the groups A, B, C, D, X, Y and Z claimed in claim 1. The Office Action alleges that Przybilla discloses the claimed photoresist base material because it discloses the compound

However, nowhere does Przybilla disclose or suggest any photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. Rather, Przybilla discloses a compound as being one of several possible dissolution inhibitors used for enhancing the solubility of the matrix polymer and the photoresist binder for a developer. The photoresist material described in Przybilla includes the dissolution inhibitor in an amount of 40 mol. %. Thus, Przybilla does not disclose or suggest applicants' claimed photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. Additionally, applicants' photoresist base material can suppress line-edge roughness of 1 nm or less. See specification, page 24, lines 11-21. Przybilla does not disclose or suggest a photoresist base material that is able to suppress line-edge roughness. New claims 21 and 24 exclude the compound disclosed in Przybilla. For the foregoing reasons, reconsideration and withdrawal of this rejection and allowance of claims 1-7, 10, 12, 16, 17, 21 and 24 are respectfully requested.

2. Claims 9, 11, 15 and 19 were rejected under 35 U.S.C. § 103(a) over Przybilla in view of the Niinomi <u>Proceedings of SPIE</u> article ("Niinomi").

As explained above, Przybilla does not disclose or suggest applicants' claimed photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. The Office Action does not suggest that Niinomi discloses the claimed photoresist base material and indeed, like Pyzybilla, it does not. Thus, there is no disclosure or suggestion in either Przybilla or Niinomi of applicants' claimed invention. Further, there is no disclosure or suggestion that any portions of the disclosures of those references

should be combined to anticipate or render obvious applicants' claimed invention. New claims 21 and 24 exclude the compound disclosed in Przybilla. Claim 19 as amended now depends from claims 21 and 22. Accordingly reconsideration and withdrawal of this rejection and allowance of claims 9, 11, 15, 19, 21 and 24 are respectfully requested.

3. Claims 13, 14 and 20 were rejected under 35 U.S.C. § 103(a) over Przybilla in view of Niinomi and Zhong U.S. Patent 7,013,965.

As explained above, neither Przybilla nor Niinomi discloses or suggests applicants' claimed photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. The Office Action does not suggest that Zhong discloses the claimed photoresist base material and like Pyzybilla and Niinomi it does not. Thus, there is no disclosure or suggestion in any of Przybilla, Niinomi or Zhong, either alone or in combination, of applicants' claimed invention. Further, there is no disclosure or suggestion that any portions of the disclosures of those references should be combined to anticipate or render obvious applicants' claimed invention. New claims 21 and 24 exclude the compound disclosed in Przybilla. Claims 20 as amended now depends from claims 21 and 22. Accordingly reconsideration and withdrawal of this rejection and allowance of claims 13, 14, 20, 21 and 24 are respectfully requested.

4. Claims 1-8, 10, 12 and 16-18 were rejected under 35 U.S.C. § 103(a) over Ito U.S. Patent 6,093,517. Claim 18 is canceled, thereby mooting the rejection of this claim.

Claim 1 claims a photoresist base material consisting essentially of an extreme ultraviolet reactive organic compound represented by the following general formula (1)

having the groups A, B, C, D, X, Y and Z claimed in claim 1. The Office Action alleges that Ito discloses the claimed photoresist base material because it describes compounds of the following formula (I):

$$\begin{array}{c} & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & \\ & & \\ & \\ & & \\ & & \\ & \\ & & \\ & \\ & \\ & & \\$$

However, like Przybilla, Ito does not disclose or suggest any photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. Rather, Ito, also like Przybilla, discloses using compounds of formula (I) as dissolution

inhibitors used for enhancing the solubility of the matrix polymer and the photoresist binder for a developer. The photoresist material described in Ito includes the dissolution inhibitor in an amount of 1 wt. % to 40 wt. %. Additionally, applicants' photoresist base material can suppress line-edge roughness of 1 nm or less. See specification, page 24, lines 11-21. Przybilla does not disclose or suggest a photoresist base material that is able to suppress line-edge roughness. Thus, Ito does not disclose or suggest applicants' claimed photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. Further, there is no disclosure or suggestion that any portions of the disclosure of Ito should be modified to yield applicants' claimed photoresist base material. New claims 22 and 25 exclude the compound disclosed in Ito. For the foregoing reasons, reconsideration and withdrawal of this rejection and allowance of claims 1-8, 10, 12, 16, 17, 22 and 25 are respectfully requested.

5. Claims 9, 11, 15 and 19 were rejected under 35 U.S.C. § 103(a) over Ito in view of Niinomi.

As explained above, Ito does not disclose or suggest applicants' claimed photoresist base material consisting essentially of an extreme ultra-violet reactive organic compound of the claimed formula. The Office Action does not suggest that Niinomi discloses the claimed photoresist base material and indeed, like Ito, it does not. Thus, there is no disclosure or suggestion in either Ito or Niinomi of applicants' claimed invention. Further, there is no disclosure or suggestion that any portions of the disclosures of those references should be combined to anticipate or render obvious applicants' claimed invention. New claims 22 and 25 exclude the compound disclosed in Ito. Claims 19 as amended depends from claims 21 and 22.

Serial No. 10/531,208

Accordingly reconsideration and withdrawal of this rejection and allowance of claims 9, 11, 15,

19, 22 and 25 are respectfully requested.

For all the foregoing reasons, all claims 1-17 and 19-15 are now proper in form and

patentably distinguished over all grounds of rejection cited in the Office Action. Accordingly,

reconsideration and allowance of all claims are respectfully requested. The PTO is hereby

authorized to charge or credit any necessary fees to Deposit Account No. 19-4293. Should the

Examiner deem that any further amendments would be desirable in placing this application in

even better condition for issue, the Examiner is invited to telephone applicants' undersigned

representative.

Respectfully submitted,

STEPTOE & JOHNSON LLP

Date: September 17, 2007

Roger W. Parkhurst Reg. No. 25,177

C. Donald Stevens

Reg. No. 53,638

STEPTOE & JOHNSON LLP 1330 Connecticut Avenue, N.W. Washington, D.C. 20036-1795

Tel: (202) 429-3000

Fax: (202) 429-3902

Attorney Docket No.: 28955.1048

RWP/CDS/cd

24